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RESISTANCE WELDING CONTROL METHOD

ABSTRACT OF THE DISCLOSURE

This invention provides a method of producing a series of substantially uniform spot welds between two metal parts using a servomotor driven movable electrode and an axially opposing fixed electrode. Target values for electrode displacement in producing a weld indentation and electrode squeeze force are determined for the electrodes and workpieces. During welding operations electrode displacement and electrode force measurements are continually taken and compared with the displacement and force target values. While the measured values are within a tolerance range of the target values, welding is continued using the preset parameters. When either or both of the measured electrode displacement or force value falls outside the target range the total welding current is adjusted in small increments to correct the displacement and/or force values and, thereafter, welding is continued using the new total welding current.